REMARKS

In the Office Action mailed January 10, 2008, the Examiner noted that claims 1-15 were pending, and rejected all claims. Claims 1, 14 and 15 have been amended, new claim 16 has been added and, thus, in view of the forgoing, claims 1-16 remain pending for reconsideration which is requested. No new matter has been added. The Examiner's rejection are traversed below.

In the Office Action the Examiner rejected claims 1-8, 14 and 15 under 35 U.S.C. section 101 as non-statutory. The claims have been amended in consideration of the Examiner's comments and it is submitted they satisfy the requirements of the statute. Withdrawal of the rejection is requested.

Page 3 of the Office Action rejects claims 1-15 under 35 U.S.C. § 103 over Komerska and Anderson.

The Komerska article has a copyright date of 2003. Under the law, the publication date of Komerska is December 31, 2003. The present application was filed on July 28, 2003. As a result, Komerska does not appear to be prior art to the present application. Withdrawal of the rejection on this basis is requested.

Even if Komerska is prior art, the claimed invention distinguishes over the prior art for the reasons discussed below.

Komerska is directed to a system that includes a widget that is used for scene navigation. For example, the widget shown in figure 3 includes a scale control that allows the user to zoom or fly into a scene while yaw and pitch controls allow the user to control the direction of the zoom. The control of the direction of the zoom or flying into the scene is by the user clicking and dragging on a yaw or pitch control. The drag on one of these controls changes the view into the scene in proportion to the dragged distance. The view does not change discretely or jump to a new position. When the pitch control is dragged, the view into the scene rotates about the horizontal scale axis of the widget. Likewise, the yaw control allows rotation about the vertical axis of the widget. The yaw widget of Komerska has a handle on one end and an arrow on the other where the arrow is labeled with an "N" for north. The yaw widget always shows the direction of north as can be seen by comparing figures 3 and 4. That is, the widget orientation does not correspond to a view into the scene but indicates the direction of north and can be used to change the view into the scene by dragging the handle. View orientation and widget orientation are disconnected as the yaw widget always points north. This same

disconnection of view direction from widget "orientation" also applies to the pitch widget. If you look at Figure 4, you can see the pitch of the view being adjusted. Notice that the vertical axis of the widget is still vertical relative to the camera, whereas the ground has tilted up considerably. The pitch widget is locked to the haptic vertical.

In contrast, the graphical user interface of claim 1, called the view compass, uses built-in target views, which the user accesses with a single click (selection action). That is, each of the views corresponds to a view into the scene. By "clicking" one of the views (or view controls), the scene jumps to that view. In effect, the view compass is a collection of seven buttons that can be used to move to the corresponding views into the scene. When the user clicks on one of the controls to cause the view to jump to that view point, the widget also changes it's orientation to match that of the scene. The view compass exists in a fixed location and size in screen space, but its orientation changes to match that of the world or view into the scene. That is, if a view control of the widget is labeled "front" and the current view into the scene was from the right side, clicking on the front control rotates the view of the scene to the front view and also rotates the widget so that the front view control is also in front. So, there is always correspondence between the views and their controls and correspondence between the orientation of the view into the scene and the orientation of the widget. The controls corresponding to the scene views is emphasized by "view direction controls each indicating a direction of a corresponding view into the three-dimensional scene". The jump or discrete move to the view corresponding to the selected view based on a selection action is emphasized by "causing a display view orientation of the three-dimensional scene to change to the corresponding view when selected". The orientation of the widget to match the orientation of the view into the scene is emphasized by "where the view controls rotate corresponding to the change in the display view orientation". Komerska does not teach or suggest such.

The Examiner points to Anderson for what are alleged to be view controls. However, Anderson is about modifying a 3D object using a two dimensional device, such as a mouse, not about views of an scene or about views that can be selected. As particularly stated by Anderson:

> It is the task of the present invention to provide a method for the direct modification of an object in the three-dimensional view with the help of an input device, preferably a mouse input device allowing only two-dimensional input.

(Anderson, col. 1, lines 46-50)

> According to the present invention, a modification effected by the user along one of the three axes is detected by tracking the movement performed by the user with the mouse and deriving a vector of motion from this operation. The

> orientation of the vector is then compared to the orientation of the axes of the isometric representation of the coordinate system on the screen. The operation performed by the user is deemed a movement towards the axis which best matches the vector obtained.

(See Anderson col. 4, lines 16-24)

> , the user selects the spherical modification point in the center of the displayed coordinate system inducing the system to expect a shift operation to follow. As mentioned above, the subsequent mouse operation is being traced in order to obtain a corresponding vector of motion. This vector is then compared to the displayed coordinate axes with regard to its direction, and a displacement is performed in the direction of the axis whose orientation best matches the obtained vector. The extent of the displacement is proportional to the mouse movement performed by the user. The movement of the coordinate system across the screen along a given axis results in a displacement of the coordinate system assigned to the object within a global coordinate system. Based on the relocation of the coordinate system, then the position of the assigned object within the global coordinate system can be determined and the respective object can be saved with these new (absolute) coordinates. Based on the thus computed object, a representation of the object on the screen in isometric view can be derived, so that a representation of the shifted object immediately after moving the representation of the coordinate system across the screen is displayed at the corresponding position on the monitor.

(See Anderson, col. 4, lines 31-53)

Anderson essentially adds nothing to Komerska with respect to the features discussed above.

Withdrawal of the rejection of clam 1 on this additional basis is requested.

Independent claims 9 and 12-14 also emphasize the features of changing or jumping to the corresponding view when the control is activated and rotating the widget to correspond to the view. Claim 15 further emphasizes a perspective view control that changes the view to a perspective view, eight axial view controls for front, back, top, bottom, left side and right side axial views as well as non-axial view controls for non axial views into the scene.

It is submitted that the independent claims distinguish over the prior art and withdrawal of the rejection is requested.

The dependent claims depend from the above-discussed independent claims and are patentable over the prior art for the reasons discussed above. The dependent claims also recite additional features not taught or suggested by the prior art. For example, claim 2 emphasizes an object in the scene is centered and sized to fit the display view when a scene change occurs responsive to selection of one of the controls. The Examiner points to figures 3 and 4 of Komerska for this feature. As can be seen by looking at and comparing figures 3 and 4 no object in the scene is centered or sized to fit the display. The scene object (the bathymetric

surface) is moved to various locations within the view and has different sizes. It is submitted that the dependent claims are independently patentable over the prior art.

New claim 16 emphasizes the eight axial controls of the orientation indicator along with discreetly changing the view when a control is clicked and the indicator rotating when the view of the scene rotates. Nothing in the prior art teaches or suggests such. It is submitted that this new claim, which is different and not narrower than prior filed claims, distinguishes over the prior art.

It is submitted that the claims satisfy are not taught, disclosed or suggested by the prior art. The claims are therefore in a condition suitable for allowance. An early Notice of Allowance is requested.

If any further fees, other than and except for the issue fee, are necessary with respect to this paper, the U.S.P.T.O. is requested to obtain the same from deposit account number 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: April 10, 2008

By: /J. Randall Beckers/
J. Randall Beckers
Registration No. 30,358

1201 New York Avenue, N.W., 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501